REMARKS

Responding in turn to the points in the Examiner's communication:

1. The title of the invention has been amended to be more descriptive.

2. Section headings have been added to the specification as required.

3. An abstract has been added to the application as a separate sheet as required.

5. Claim 5 has been amended to delete the phrase "such as".

6. This rejection is in part respectfully traversed and in part overcome by amendment. It is respectfully submitted that "the analysis" in Claim 6 is properly defined, and has implicit antecedent. "The analysis" is stated in the claim to be that analysis which is employed for the compression encoded audio signal. Nonetheless, in an attempt to further improve its clarity, this claim has been amended to include explicit antecedent basis for the term "the analysis." Basis for this amendment can be found, for example, on page 5, lines 15 to 16, and page 6, line 19.

7. Claims 19 and 20 have been amended to remove the expressions "sensible use" and "tell tale" respectively. Basis for this amendment can be found, for example, on page 4, lines 22 to 26, on page 1, lines 22 to 24, and on page 7, line 9.

9. The Examiner has rejected independent Claims 1 and 6 as being anticipated by Davis et al. (US 5,583,962). This rejection is respectfully traversed.

Briefly considering first the present invention:

The present invention, as defined by Claim 1, provides a method of audio signal handling comprising the steps of receiving a compression encoded audio signal and compression decoding the compression encoded audio signal to produce a decoded audio signal, deriving an auxiliary data signal relating to the compression encoded audio signal, communicating the auxiliary data signal together with the decoded audio signal and re-encoding the decoded audio signal utilising information from the auxiliary data signal.

It can be seen therefore, that the input and output of the method of the present invention is coded audio, and that the invention relates to the passage of decoded audio from a decoder to an encoder, together with auxiliary data.

Considering now the teaching of Davis:

Davis discloses an encoder which can produce a composite audio-information signal, and a steering control signal (col. 6, lines 21-24). The composite signal is a multiplexed signal which allows a number of discrete channels to be passed along a single signal path. The steering control signal is passed along with the composite signal, and allows the composite signal to be demultiplexed at a decoder.

9

Davis, in contrast, therefore relates to the passage of <u>coded</u> audio from an <u>en</u>coder to a <u>de</u>coder, i.e. the converse situation to that of the present invention. It is therefore considered that Davis does not anticipate the present invention. Nevertheless the specific points raised by the Examiner will be discussed in detail.

In the Office Action the Examiner considers that Davis teaches the method of the present invention at columns 8 & 9, and at Figure 5, as:

"decoding formatted data, extracting spectral information, calculating a steering quantity and re-encoding the information wrt the steering information."

Applicant respectfully refutes this assertion.

Column 8, lines 44-64 describes the conventional processes of subband decomposition and quantization, with reference to Figure 4 (encoder) and Figure 5 (decoder). Significantly, no mention at all is made of any auxiliary or steering signal.

Column 9 of Davis explains, at a high level, the concept of a subband steering. It is stated that subband steering combines components from two or more channels in a particular subband to form a composite signal and a steering control signal. This is performed for <u>encoding</u> a plurality of uncoded inputs (col 8, line 66 – col 9, line 2).

Generation of the steering control signal is described with reference to Figures 2 and 3 (col 9, lines 40-47). Both Figures 2 and 3 show <u>encoders</u>, as described at col 6, lines 55-62 and col 7, lines 19-27.

The cited passages of Davis therefore describe how, at an <u>encoder</u>, a steering signal can be derived during encoding. Also described is typical subband decoding with no reference to any auxiliary or steering signal.

It is therefore respectfully submitted that Davis does not disclose the claimed method of the present invention, including the claimed steps of "deriving an auxiliary data signal relating to the compression <u>encoded</u> audio signal, communicating the auxiliary data signal together with the <u>decoded</u> audio signal and re-<u>en</u>coding the decoded audio signal utilising information from the auxiliary data signal".

It is therefore considered that Claim 1 and Claim 6 are novel and patentable over the cited prior art.

As per Claim 2, this is considered patentable at least by virtue of dependency on Claim 1. Furthermore it is respectfully submitted that the cited passage of Davis merely states that steering information is associated with subbands, and does not teach the method of Claim 2 which requires the auxiliary data signal to comprise all or part of the encoded signal.

As per Claim 3, this is considered patentable at least by virtue of dependency on Claim 2, and thereby on Claim 1.

As per Claim 4, this is considered patentable at least by virtue of dependency on Claim 3, thereby on Claim 2 and thereby on Claim 1.

As per Claim 7, this is considered patentable at least by virtue of dependency on Claim 6.

As per Claims 8, this is considered patentable at least by virtue of dependency on Claim 7 and thereby on Claim 6. Furthermore it is respectfully noted that the cited passage of Davis makes no mention at all of quantisation.

As per Claims 15 and 16, these are considered patentable at least by virtue of indirect dependency on Claim 1. Furthermore it is respectfully submitted that the cited passage of Davis refers only to the content of the steering signal, and not to where the signal <u>is carried</u>, as recited in these claims.

As per Claim 10, this is considered patentable at least by virtue of indirect dependency on Claim 1.

As per Claim 11, this is considered patentable at least by virtue of dependency on Claim 1. Furthermore it is respectfully submitted that Figure 8 does not show a common path for the auxiliary data and the decoded data. Figure 8 of Davis shows the steering control signal received from path 55, and the audio signal received from a separate path 56. Moreover path 56 passes "quantized code words". That is, encoded audio is passed to a decoder. Figure 8 therefore does not show the auxiliary signal combined with decoded audio, as claimed in Claim 11.

As per Claim 12, this is considered patentable at least by virtue of indirect dependency on Claim 1.

As per Claim 18, this is considered patentable at least by virtue of dependency on Claim 1.

As per Claim 13, this is considered patentable at least by virtue of indirect dependency on Claim 1. Furthermore it is respectfully submitted that the cited Table 1 of Davis refers to bit allocation for the subband coding of an audio signal, and does not disclose or make any mention of an auxiliary signal carried in a decoded audio signal as recited in the claim.

As per Claim 14, this is considered patentable at least by virtue of indirect dependency on Claim 1.
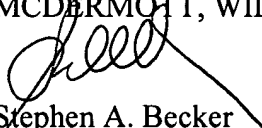
11. Claims 9 and 17 are considered patentable at least by virtue of their dependency on Claim 1.

Applicant respectfully requests favorable reconsideration and issuance of a Notice of Allowance.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY

Stephen A. Becker
Registration No. 26,527

600 13th Street, N.W.
Washington, DC 20005-3096
(202) 756-8000 SAB:cms
Facsimile: (202) 756-8087
Date: May 3, 2004